

2003 INTERNATIONAL BUILDING CODE
TABLE 302.1.1
INCIDENTAL USE AREAS

In table 302.1.1 there are areas where a fire separation is required from the rest of the building. The areas include furnace rooms, boilers, laundry rooms, storage rooms, etc. The table allows for a “domestic” type sprinkler system to be used in lieu of a fire wall. Only the room is required to be sprinklered and the remaining building may not be sprinklered. The Group 1, A Occupancy Committee, felt strongly against this requirement. For many years we have not approved these systems based on experience with the state requirement for janitor closets in schools and other experiences. Below are reasons we support a code amendment.

NFPA 13 does not recognize a partially sprinklered building.
The systems are not hydraulically proven they will work in a fire.
Shutoff vales are not required to be supervised and are often left off.
The system is not required to be monitored and could cause serious water damage after hours if undetected.
There are no specific maintenance requirements to ensure they will work years from now.
Firefighters are unaware of the location of these systems.

It would probably be more economical to install a fire wall if we required all of the above to be addressed in our enforcement of this table of the IBC.

We wish to propose an amendment to eliminate footnote a of Table 302.1.1 of the IBC during the next code adoption process.

COMPARSION OF 2001 CBC AND 2003 IBC

Specific Sprinkler Requirements for A Occupancies

<u>CBC SECTION</u>	<u>IBC SECTION</u>	<u>COMMENTS</u>
904.2.3.1 Drinking Establishments	903.2.1.2	Same Requirement IBC uses >300 occupant load and CBC uses 5,000 sq. ft. or 333 occupant load.
904.2.3.2 Basements	903.2.1.1 thru .4	Same Requirement
904.2.3.3 Exhibition and Display	903.2.1.3	Same Requirement
904.2.3.4 Space under Stairs	903.2.1 and 1019.1.5	CBC requires sprinklers and IBC a one hour enclosure if not sprinklered.
904.2.3.5 Multi-theater Complex	903.2.1.1 # 4	Same Requirement
904.2.3.6 Amusement Buildings	411.4 and 903.4	Same Requirement
904.2.3.7 Stages	410.6	Same Requirement
904.2.3.8 Smoke Protected Seating	1024.6.2.3	Same Requirement

Special Note: See IBC Sections 903.2.1.3 and 903.2.1.4. In the IBC there is an exception for A-3 and A-4 Occupancies. The exception is for fire areas used exclusively for participant sports. The requirement is not clear if spectator areas are required to be sprinklered.

Specific Standpipe Requirements for A Occupancies

<u>CBC SECTION</u>	<u>IBC SECTION</u>	<u>COMMENTS</u>
904.5.4 Class II Standpipes	905.5.1	Almost the same requirement except IBC Section 905.5.3 allows reduction to a 1 inch hose if light hazard and approved by Bldg. Official.
Table 9-A Group A > 1,000 Non-sprinklered	905.3.2	CBC exempts places of worship, IBC does not CBC requires Class II IBC requires Class I
Table 9-A Group A > 5,000 Used for Exhibition		No requirement found in IBC, CBC requires Class II
Table 9-A Stages > 1,000 sq. ft.	905.3.4	Almost the same. IBC requires Class II and CBC requires same except non-sprinklered bldg must also have Class II.

Specific Alarm Requirements for A Occupancies

<u>CBC SECTION</u>	<u>IBC SECTION</u>	<u>COMMENTS</u>
303.9 of CBC says see CFC 1006.2.2.1 General	907.2.1 907.2.1.1	Codes differ. CFC requires pre-recorded announcement if manual pulls are omitted for 300 or more. IBC only requires alarm notification and no announcement for 300-1,000. Pre-recorded announcement only required for > 1,000.
1006.2.2.2 (CFC) Group A, > 1,000	907.2.1.1	Need to insert SFM amendment into this IBC section. “.....NFPA 72 as amended in Article_____”.
1006.2.2.3(CFC)	907.2.1.2	Same Requirement

General Sprinkler Requirements

<u>CBC SECTION</u>	<u>IBC SECTION</u>	<u>COMMENTS</u>
904.2.2 #1 All Occupancies	903.2.10.1 903.2.10.1.1 903.2.10.1.2 903.2.10.1.3	Same Requirements
904.2.2 # 2 Chutes	903.2.10.2	Same Requirements
904.2.2 # 3 Nitrate Film		Requirement found in IFC
904.2.2 # 4 Fiber Storage	Table 903.2.13	Requirement found in IFC Not exactly same but OK
904.2.2 # 5 High Rises	903.2.10.3	Same Requirement

CODE ANALYSIS
CBC => IBC

For Provisions Found in:
CBC §303.3

CBC Requirements

IBC Response

<ul style="list-style-type: none">• “A” Occupancy shall front or discharge to a public street not less than 20’ width.• Exit discharge to a public street shall be not less than 20’ in width.• Main entrance to be on a public street or adjacent to the exit discharge.• Fire resistive protection of wall and opening shall be as determined by location on property per §503 and Chapter 6.	<ul style="list-style-type: none">• §1024.2 – Main exit shall front on street or unoccupied space not less than 10’ in width. (Exception allows even distribution of exits when no main exit exists or when multiple main exits exist.)• §1023.6 – Exit discharge to provide a direct and unobstructed access to public way. (With stated exceptions)• §1024.2 – See comment “A” above.• See attached examples.
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EXAMPLES

Wall & Opening Protection

Example #1

Given: Fast Food Restaurant; Occupant load, 95; Wall proximity to P/L, 4 feet.

CBC

Occupancy Group, A-3

Type of Construction, V-N

Wall Protection req'd., 2 hour

Opening Protection: Prohibited

area.

IBC

Occupancy Group, A-2 (ref. §303.1)

Type of Construction, V-B (ref. Table 503)

Wall Protection req'd., 1 hour (ref. Table 602)

Opening Protection: 45 minute protected,
opening area not to exceed 45% of wall

(ref. Table 704.8 and 715.4)

Example #2

Given: Church; Occupant load, 395; Wall proximity to P/L, 15'

CBC

Occupancy Group, A-2.1

Type of Construction, II-1Hr.

Wall Protection req'd., 1 Hour

Opening Protection, Un-protected

IBC

Occupancy Group, A-3 (ref. §303.1)

Type of Construction, II-A (ref. Table 503,
601, and 602)

Wall Protection, 1 Hour (ref. Table 602 & 601)

Opening Protection: 45 minute protected
not to exceed 45% of wall area OR
unprotected openings not to exceed 15%
of wall area OR any combination thereof

such

that the "mixed area" calculation shall not
exceed 1 (ratio similar to mixed occupancy
calculation as found in CBC).

(ref. Table 704.8 and 715.4)

Example #3

Given: Theater; Occupant load, 1,500 w/stage; Wall proximity to P/L, 15'

CBC

Occupancy Group, A-1

Type of Construction, I-F.R.

Wall Protection req'd., 4 hour

Opening Protection, Protected

IBC

Occupancy Group, A-1 (ref. §303.1)

Type of Construction, I-A (ref. Table 503, 601
and 602)

Wall protection req'd., 3 hour (ref. Table 601)

Opening Protection: 1-1/2 hour protected
not to exceed 45% of wall area OR
unprotected openings not to exceed 15%
of wall area OR any combination thereof

such

that the "mixed area" calculation shall not
exceed 1 (ratio similar to mixed occupancy
calculation as found in CBC).

(ref. Table 704.8 and 715.4)

CODE ANALYSIS
CBC => IBC

For Provisions Found in:
CBC §303.2.2.2

CBC Requirements

- Division 3 occupancy in basement or above the first floor shall be not less than 1 hour fire resistive construction.
- Division 3 occupancy with 50 or more occupants and located over usable space shall be separated from such space by not less than 1 hour fire resistive construction.
- For Division 3 occupancies with an S-3 parking garage in the basement or first floor, see § 311.2.2. (Specifically 311.2.2.1 for S-3 with A-3 above.)
- For SFM – Specific language inserted which states that motion picture studios, sound stages and film production facilities with live audience stages to be in accordance with the CA Fire Code.

IBC Response

- §706.3.7 & Table 706.3.7 – Two hour fire barrier is required to separate a “single occupancy” into smaller units if sprinklers are installed.
- §903.2.1 – For A-1 through A-4 occupancies in basements or above the first floor sprinklers are required.
- §302.3.2 & Table 302.3.2 requires not less than 1 hour occupancy separation between all other occupancy types (H-1 not permitted)
- §903.2.1 – Requires sprinklers when fire area exceeds 300 occupants (Note: Per §702.1 a fire area encompasses all spaces between fire walls, barriers, etc.)
- §508.2 – This section provides substantially the same requirement as the CBC.
- SFM may desire this language to be added to IBC §409 and/or 410.